

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/577,973
Source: IEWP
Date Processed by STIC: 5-15-06

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IFWP

RAW SEQUENCE LISTING

DATE: 05/15/2006

PATENT APPLICATION: US/10/577,973

TIME: 10:02:37

Input Set : A:\50318.013001.txt

Output Set: N:\CRF4\05152006\J577973.raw

3 <110> APPLICANT: Ensoli, Barbara
 4 Caputo, Antonella
 5 Laus, Michele
 6 Tondelli, Luisa
 7 Sparnacci, Katia
 9 <120> TITLE OF INVENTION: Nanoparticles for Delivery of a Pharmacologically Active Agent

11 <130> FILE REFERENCE: 50318/013001
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/577,973
 C--> 13 <141> CURRENT FILING DATE: 2006-05-03
 13 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/012420
 14 <151> PRIOR FILING DATE: 2004-11-03
 16 <150> PRIOR APPLICATION NUMBER: GB 0325625.2
 17 <151> PRIOR FILING DATE: 2003-11-03
 19 <160> NUMBER OF SEQ ID NOS: 40
 21 <170> SOFTWARE: PatentIn version 3.3
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 309
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Human immunodeficiency virus
 29 <220> FEATURE:
 30 <221> NAME/KEY: CDS
 31 <222> LOCATION: (1)..(309)
 33 <400> SEQUENCE: 1

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| 34 | atg gag cca gta gat cct cgt cta gag ccc tgg aag cat cca gga agt | 48 |
| 35 | Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser | |
| 36 | 1 5 10 15 | |
| 38 | cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt | 96 |
| 39 | Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe | |
| 40 | 20 25 30 | |
| 42 | cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tac ggc | 144 |
| 43 | His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly | |
| 44 | 35 40 45 | |
| 46 | agg aag aag cgg aga cag cgt cga aga cct cct caa ggc agt cag act | 192 |
| 47 | Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr | |
| 48 | 50 55 60 | |
| 50 | cat caa gtt tct cta tca aag caa ccc acc tcc caa tcc cga ggg gac | 240 |
| 51 | His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp | |
| 52 | 65 70 75 80 | |
| 54 | ccg aca ggc ccg aag gaa cag aag aag aag gtg gag aga gag aca gag | 288 |
| 55 | Pro Thr Gly Pro Lys Glu Gln Lys Lys Lys Val Glu Arg Glu Thr Glu | |
| 56 | 85 90 95 | |
| 58 | aca gat ccg gtc cat cag tga | 309 |
| 59 | Thr Asp Pro Val His Gln | |

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63 <210> SEQ ID NO: 2
64 <211> LENGTH: 102
65 <212> TYPE: PRT
66 <213> ORGANISM: Human immunodeficiency virus
68 <400> SEQUENCE: 2
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71 1          5          10          15
74 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
75          20          25          30
78 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
79          35          40          45
82 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
83          50          55          60
86 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
87 65          70          75          80
90 Pro Thr Gly Pro Lys Glu Gln Lys Lys Lys Val Glu Arg Glu Thr Glu
91          85          90          95
94 Thr Asp Pro Val His Gln
95          100
98 <210> SEQ ID NO: 3
99 <211> LENGTH: 261
100 <212> TYPE: DNA
101 <213> ORGANISM: Human immunodeficiency virus
104 <220> FEATURE:
105 <221> NAME/KEY: CDS
106 <222> LOCATION: (1)..(261)
108 <400> SEQUENCE: 3
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111 1          5          10          15
113 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt      96
114 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
115          20          25          30
117 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tac ggc      144
118 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
119          35          40          45
121 agg aag aag cgg aga cag cgt cga aga cct cct caa ggc agt cag act      192
122 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
123          50          55          60
125 cat caa gtt tct cta tca aag caa ccc acc tcc caa tcc cga ggg gac      240
126 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
127 65          70          75          80
129 ccg aca ggc ccg aag gaa tag      261
130 Pro Thr Gly Pro Lys Glu
131          85
134 <210> SEQ ID NO: 4
135 <211> LENGTH: 86
136 <212> TYPE: PRT

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137 <213> ORGANISM: Human immunodeficiency virus
139 <400> SEQUENCE: 4
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145 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
146 20 25 30
149 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
150 35 40 45
153 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
154 50 55 60
157 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
158 65 70 75 80
161 Pro Thr Gly Pro Lys Glu
162 85
165 <210> SEQ ID NO: 5
166 <211> LENGTH: 261
167 <212> TYPE: DNA
168 <213> ORGANISM: Human immunodeficiency virus
171 <220> FEATURE:
172 <221> NAME/KEY: CDS
173 <222> LOCATION: (1)..(261)
175 <400> SEQUENCE: 5
176 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt 48
177 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
178 1 5 10 15
180 cag cct aaa act gct ggt acc aat tgc tat tgt aaa aag tgt tgc ttt 96
181 Gln Pro Lys Thr Ala Gly Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
182 20 25 30
184 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tat ggc 144
185 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
186 35 40 45
188 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act 192
189 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
190 50 55 60
192 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc cga ggg gac 240
193 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
194 65 70 75 80
196 ccg aca ggc ccg aag gaa tag 261
197 Pro Thr Gly Pro Lys Glu
198 85
201 <210> SEQ ID NO: 6
202 <211> LENGTH: 86
203 <212> TYPE: PRT
204 <213> ORGANISM: Human immunodeficiency virus
206 <400> SEQUENCE: 6
208 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
209 1 5 10 15
212 Gln Pro Lys Thr Ala Gly Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
213 20 25 30

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216 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
217          35          40          45
220 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
221          50          55          60
224 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
225 65          70          75          80
228 Pro Thr Gly Pro Lys Glu
229          85
232 <210> SEQ ID NO: 7
233 <211> LENGTH: 261
234 <212> TYPE: DNA
235 <213> ORGANISM: Human immunodeficiency virus
238 <220> FEATURE:
239 <221> NAME/KEY: CDS
240 <222> LOCATION: (1)..(261)
242 <400> SEQUENCE: 7
243 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt      48
244 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
245 1          5          10          15
247 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt      96
248 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
249          20          25          30
251 cat tgc caa gtt tgt ttc ata aca gct gcc tta ggc atc tcc tat ggc      144
252 His Cys Gln Val Cys Phe Ile Thr Ala Ala Leu Gly Ile Ser Tyr Gly
253          35          40          45
255 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act      192
256 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
257          50          55          60
259 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc cga ggg gac      240
260 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
261 65          70          75          80
263 ccg aca ggc ccg aag gaa tag      261
264 Pro Thr Gly Pro Lys Glu
265          85
268 <210> SEQ ID NO: 8
269 <211> LENGTH: 86
270 <212> TYPE: PRT
271 <213> ORGANISM: Human immunodeficiency virus
273 <400> SEQUENCE: 8
275 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
276 1          5          10          15
279 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
280          20          25          30
283 His Cys Gln Val Cys Phe Ile Thr Ala Ala Leu Gly Ile Ser Tyr Gly
284          35          40          45
287 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
288          50          55          60
291 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
292 65          70          75          80

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296                               85
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300 <211> LENGTH: 252
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302 <213> ORGANISM: Human immunodeficiency virus
305 <220> FEATURE:
306 <221> NAME/KEY: CDS
307 <222> LOCATION: (1)..(252)
309 <400> SEQUENCE: 9
310 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt      48
311 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
312 1                               5                               10                               15
314 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt      96
315 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
316                               20                               25                               30
318 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tat ggc      144
319 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
320                               35                               40                               45
322 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act      192
323 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
324 50                               55                               60
326 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc ccg aca ggc      240
327 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly
328 65                               70                               75                               80
330 ccg aag gaa tag      252
331 Pro Lys Glu
335 <210> SEQ ID NO: 10
336 <211> LENGTH: 83
337 <212> TYPE: PRT
338 <213> ORGANISM: Human immunodeficiency virus
340 <400> SEQUENCE: 10
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343 1                               5                               10                               15
346 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
347                               20                               25                               30
350 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
351                               35                               40                               45
354 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
355 50                               55                               60
358 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly
359 65                               70                               75                               80
362 Pro Lys Glu
366 <210> SEQ ID NO: 11
367 <211> LENGTH: 252
368 <212> TYPE: DNA
369 <213> ORGANISM: Human immunodeficiency virus
372 <220> FEATURE:
373 <221> NAME/KEY: CDS

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VERIFICATION SUMMARY

DATE: 05/15/2006

PATENT APPLICATION: US/10/577,973

TIME: 10:02:38

Input Set : A:\50318.013001.txt

Output Set: N:\CRF4\05152006\J577973.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date